

# Electronic Patient Empowerment: A Vermont Educational Paradigm

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In an effort to take a leadership role in Vermont's health care reform, the state's only academic medical center is developing an integrated system of care built on a strong educational foundation that has always focused on the whole patient. To teach the concept of patient empowerment as an essential component of total health care, and to meet the goal of informed health consumer choice specified in the working documents of the Vermont Health Care Authority, the UVM College of Medicine has begun a selective use of two powerful tools, the Problem Oriented Medical Record and Problem Knowledge Couplers (PKC) [1], in its core clerkships.

Problem Knowledge Couplers are a clinical tool which combine problem-oriented patient evaluation, clinical decision support, the best precepts of evidence-based medicine, all supported by a knowledge net. However, pursuant to patient empowerment, the patient information output of the coupling process does something that many patient educational systems do not. It elicits and matches the many details about the unique patient to the details in the medical literature that are relevant to solving that patient's diagnostic or management problem.

Health care provider or self referrals to patient educational materials serve the purpose of providing generalized information about a particular diagnosis or therapy. In the best of all situations, the patient finds relevance in the generic information. In the worst of all cases, the patient finds the diagnosis has been incorrect, the therapy ineffectual or even harmful because of some underlying problem not related to the disease in question. In addition, the patient often becomes a victim of information overload. In one instance, the patient may find too much information about a problem and feel unable to make a health care decision; in another instance the patient may focus on some critical piece of

information that is irrelevant to his or her situation and make behavioral changes which could negatively impact health status.

Patient uniqueness is as essential a component of patient education as the quality of the health information being provided; Problem Knowledge Couplers, through a problem-oriented patient record, recognize this and are grounded in the concept. The patient information component of the Problem Knowledge Couplers analyzes the patient's present status, not giving a single diagnosis but listing all confounding elements relating to the specific problem and tangential problems. This information is integrated with the supporting medical literature found in the knowledge net, enabling the patient to feel confident, not only about the evaluation (a diagnostic coupler), but also about the proposed management of the health problems (a management coupler).

This Electronic Poster will demonstrate Problem Knowledge Couplers as they relate to the patient empowerment process, provide examples of individualized patient printouts, and show how the couplers can be used in education to teach the concept of patient management through information dissemination. True patient empowerment is not just giving access to generic information concerning a specific disease or therapy but it is giving the patient information tools that help the individual solve the specific diagnostic or management problem within the context of his or her life. The PKC approach to medical care appears to offer the first viable mechanism to achieve this end.

## Reference

- [1]. L. Weed. Knowledge Coupling: New Premises and New Tools for Medical Care and Education. Springer-Verlag, New York, 1991.